Work Order ID 100851 *100851*

May-01-13 7:30:31 AM

Item ID: D2810-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Strut

Start Date: 4/30/13 **Start Qty:** 5.00 *5* **Cust Item ID:**

Required Date: 4/30/13 **Req'd Qty:** 5.00 *5* **Customer:**

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLS **Date:** 13-05-03 **Tooling:** ____ **Date:** ____

QC: ____ **Date:** ____ **SPC (Y/N):** ____ **Date:** ____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D2810	Rev C

100 *100* Brake NC / Brake NC

NC BRAKE — 0.00 — Accept Qty: 5 — SAD — 13-10-30

Memo 0.00

1-Punch 304/316 SS Seamless Tubing 0.5" O.D. x 0.035" wall to length as per Dwg D2810 and spec control Dwg D2727 using Jig DT8012

2-Deburr 24.06

110 *110* QC / Quality Control

QC5- Inspect part completeness to step on W/O — 0.00 — DAS 16 9-89 — 13/10/30 — (stamp)

Memo 0.00

120 *120* Powdercoat / Powder Coating

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3 — 0.00 — 5 — ∅ — 13-10-30 — DAS 34 9-89

M117338

Memo 0.00

START TIME: 1:05

OVEN TEMPERATURE: 300°

FINISH TIME: 1:35

DQA: ________ Date: ____________

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: ____________ Part No. ____________ NCR No. ____________	**DISPOSITION** Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	**AGAINST DEPARTMENT/PROCESS** Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear	General			
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized	☐ Pressure/Forced
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance	☐ Temperature/Cure
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect	☐ Weld
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing	☐ Wrong Stock Pulled
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved	
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong	
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge	☐ Other ____
☐ Ripples in Bend	☐ Drill Holes	☐ Offset	____________	
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration	____________	
☐ Turning Sequence	☐ Finish	☐ Out of Sequence	____________	
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions		

Work Order ID 100851 *100851*

May-01-13 7:30:31 AM

Item ID:	D2810-5	**Accept**	*N900040100*
Revision ID:		**Setup**	**Start** *NS1*
Item Name:	Strut		**Stop** *NS2*
Start Date:	4/30/13	**Start Qty:** 5.00 *5*	**Cust Item ID:**
Required Date:	4/30/13	**Req'd Qty:** 5.00 *5*	**Customer:**
Reference:			

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Run **Start** *NR1* **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC3- Inspect Part Finish **Memo**	0.00 0.00				13/10/30	(5)		DAS 32 9-89
140 *140* Packaging Packaging	Identify as per dwg & Stock Location: ST253 **Memo**	0.00 0.00				5X	DAS 28 9-89	13-10-30	
150 *150* QC Quality Control	QC21- Final Inspection - Work Order Release **Memo**	0.00 0.00					13/10/31		[signature]

W13-10-31

DQA: ________ Date: ____________

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: ________	**DISPOSITION**	**AGAINST DEPARTMENT/PROCESS**			
Part No. ________	Rework ☐	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
NCR No. ________	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
	Work Order Update ☐	Large Fab ☐	Composite ☐	Supplier ☐	☐

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	**General**			
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized	☐ Pressure/Forced
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☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved	
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong	
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge	☐ Other
☐ Ripples in Bend	☐ Drill Holes	☐ Offset		
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration		
☐ Turning Sequence	☐ Finish	☐ Out of Sequence		
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions		

Picklist Print

May-01-13 7:30:31 AM

Work Order ID: 100851

Parent Item: D2810-5

Parent Item Name: Strut

Start Date: 4/30/13 **Required Date:** 4/30/13

Start Qty: 5.00 **Required Qty:** 5.00

Comments: IPP A04.11.30New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TR0.500W.035 304 RD Tube .500 x .035W		Purchased	No			100	f	335.4143	**1.9175**	**10.092106**	SAD	13-10-30	

Location	Loc Qty	Loc Code	
MAT017	335.41433		
120633	70.1979		
121848	29.92344		
123303	187.1315		
123449	48.16149	M126922	10.0922

DQA: ________ Date: ____________

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: ____________ Part No. ____________ NCR No. ____________	**DISPOSITION** Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	**AGAINST DEPARTMENT/PROCESS** Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐ Equip/Tooling ☐ Operator ☐ Material ☐ Setup ☐ Other ☐ Process ☐ Supplier ☐ Training ☐ Unapproved ☐									

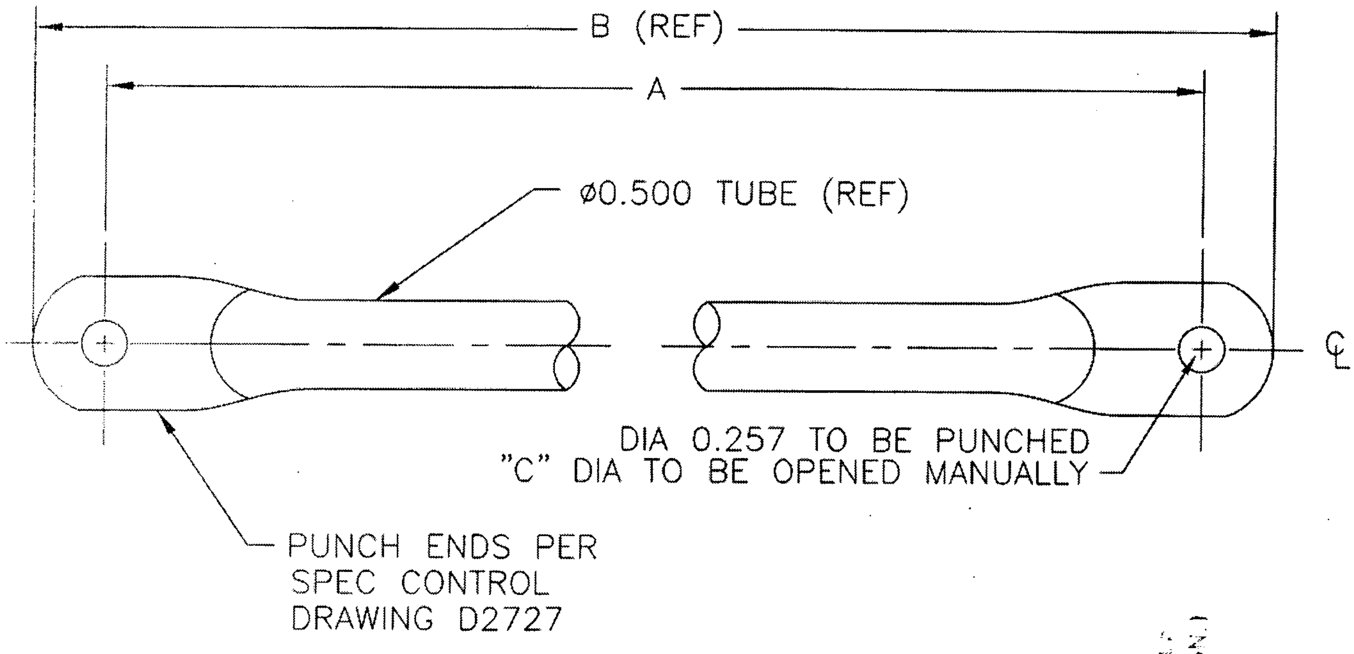
FAULT CATEGORY

Landing Gear	General			
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☐ Turning Sequence	☐ Finish	☐ Out of Sequence	____________	
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions		

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D2810	REV. C SHEET 1 OF 1
DATE 04.11.22		TITLE STRUT	SCALE NTS

A	00.11.08	NEW ISSUE
B	03.09.11	ADD FINISH
C	04.11.22	ADD -5

RELEASED



PART #	A	B	C
D2810-1	25.33	26.13	N/A
D2810-3	24.60	25.40	N/A
D2810-5	23.01	23.81	0.266

24.06

100851 MC5
13-05-03

D2810-1/-3/-5

1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE, ⌀0.500 x 0.035 WALL (M304TR0.500W.035)
2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
4) ALL DIMENSIONS ARE IN INCHES

DART AEROSPACE LTD

Description: Strut		Work Order: 100851
Inspection Drawing: D2810-5	Rev: C	Part Number: D2810-5

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
23.01	+/- 0.030	23.00	✓		H-T	SAD-1
23.81	+/- 0.030	23.81	✓		H-T	SAD-1
0.266	+/- 0.006 0.001	0.266	✓		Vern	SFAB-08
~~0.040~~	~~0.010~~				~~Vern~~	
0.040	0.010	0.037	✓		Vern	SFAB-08

Measured by: SAD	Checked By: DAS 30 9-89	QC inspector: DAS 16 9-89	Engineering Approval (*if necessary*):
Date 13-10-20	Date 13/10/20	Date 13/10/20	Date

H:\FORMS\Quality Assurance\approved QA\Inspection sheet revA